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(54) **RING BUFFERED NETWORK BUS DATA MANAGEMENT SYSTEM**

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(57) **ABSTRACT**

A data management system (10) for managing and distributing high-speed, real-time and archived data between diverse local and remote data sources (26) and data sinks (30). The system includes a server (12) having cache memory (14) and archive memory (18) and one or more ring buffered network bus (RBNB) modules (24). Each RBNB module features a highly modular, object-oriented design, with the RBNB module being the highest level object in the system. The RBNB modules include a plurality of ring buffer objects (42) that handles data streams from data sources, a plurality of network bus objects (44) that handle data streams to a data sinks, and RBNB control objects (40) the handle connections for the ring buffer objects and network bus objects. Data is handled by the RBNB module in data frame (68) increments based on the combination of identified channels (116) and time stamps (250).

37 Claims, 8 Drawing Sheets

